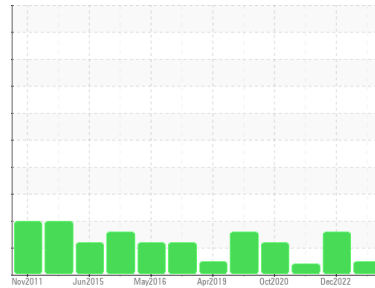


# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Machine Id  
**KAESER BSD50 4029513 (S/N 1081)**

Component  
**Compressor**

Fluid  
**KAESER SIGMA (OEM) S-460 (--- GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

#### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>KCPA009047</b>	KCP49455	KCP42096
Sample Date	Client Info		<b>13 Nov 2023</b>	01 Dec 2022	07 Mar 2022
Machine Age	hrs	Client Info	<b>58588</b>	58387	57990
Oil Age	hrs	Client Info	<b>0</b>	349	47
Oil Changed	Client Info		<b>N/A</b>	Not Changd	Changed
Sample Status			<b>NORMAL</b>	ATTENTION	ABNORMAL

### WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >50	<b>0</b>	<1	1
Chromium	ppm	ASTM D5185m >10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >3	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m >3	<b>0</b>	0	0
Silver	ppm	ASTM D5185m >2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >10	<b>&lt;1</b>	<1	2
Lead	ppm	ASTM D5185m >10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m >50	<b>15</b>	2	1
Tin	ppm	ASTM D5185m >10	<b>0</b>	0	0
Antimony	ppm	ASTM D5185m	<b>---</b>	---	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m 90	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m 90	<b>3</b>	57	75
Calcium	ppm	ASTM D5185m 2	<b>1</b>	<1	0
Phosphorus	ppm	ASTM D5185m	<b>1</b>	4	5
Zinc	ppm	ASTM D5185m	<b>53</b>	24	46
Sulfur	ppm	ASTM D5185m	<b>16559</b>	21062	17502

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>&lt;1</b>	<1	0
Sodium	ppm	ASTM D5185m	<b>1</b>	28	26
Potassium	ppm	ASTM D5185m >20	<b>0</b>	4	8
Water	%	ASTM D6304 >0.05	<b>0.005</b>	0.015	0.023
ppm Water	ppm	ASTM D6304 >500	<b>57.4</b>	155.0	232.8

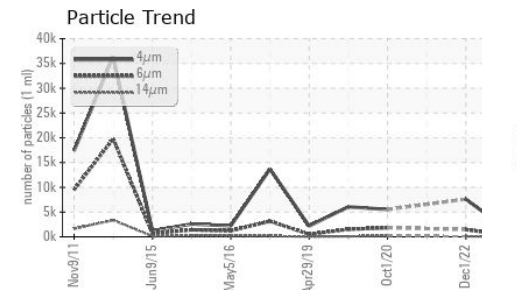
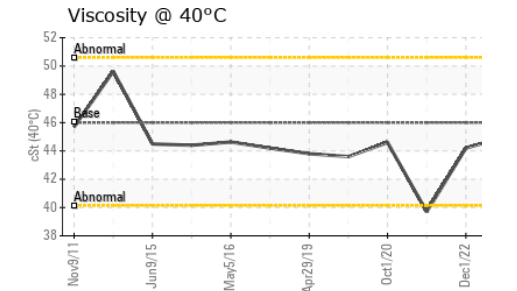
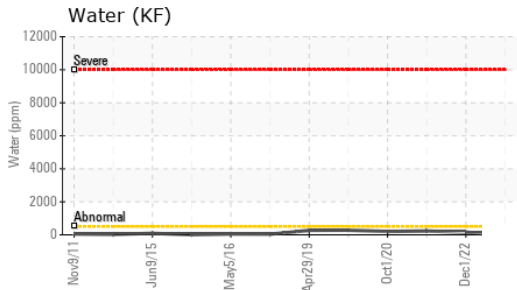
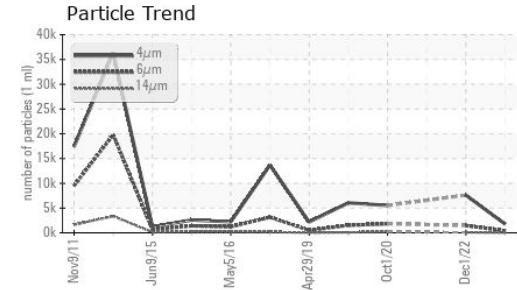
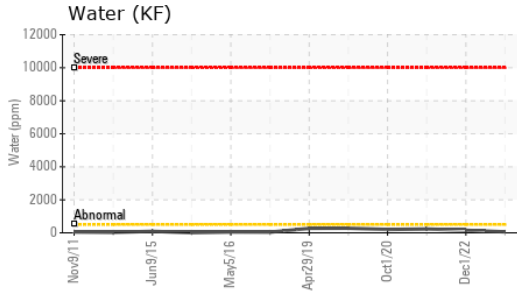
### FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		<b>1760</b>	7596	---
Particles >6µm	ASTM D7647 >1300		<b>399</b>	▲ 1469	---
Particles >14µm	ASTM D7647 >80		<b>29</b>	▲ 89	---
Particles >21µm	ASTM D7647 >20		<b>6</b>	▲ 27	---
Particles >38µm	ASTM D7647 >4		<b>1</b>	2	---
Particles >71µm	ASTM D7647 >3		<b>0</b>	0	---
Oil Cleanliness	ISO 4406 (c) >--/17/13		<b>18/16/12</b>	▲ 20/18/14	---

### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 0.4	<b>0.35</b>	0.35	0.37

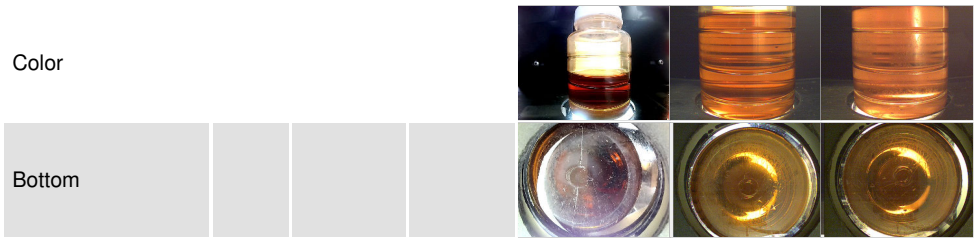
# OIL ANALYSIS REPORT



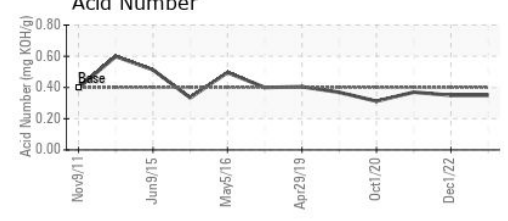
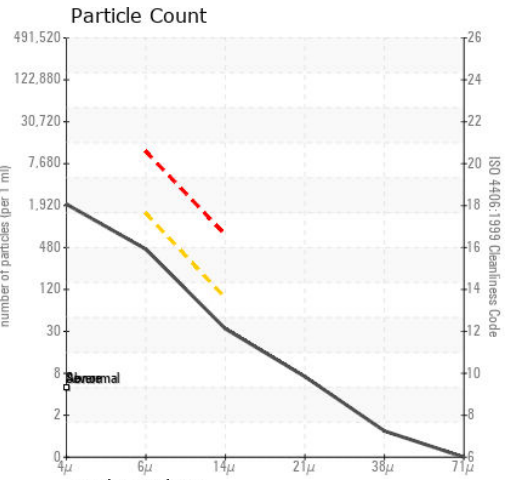
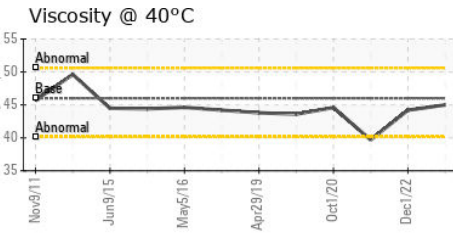
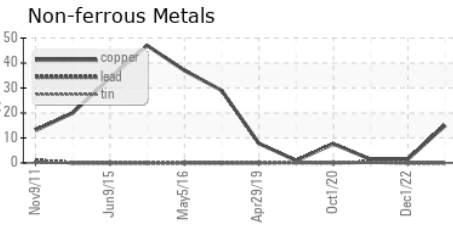
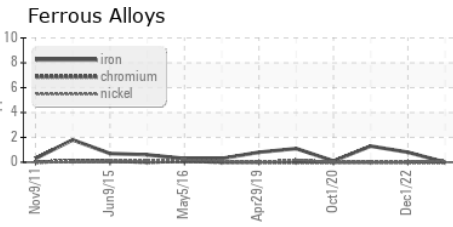
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445 46	45.0	44.2	39.7

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : KCPA009047 **Received** : 20 Nov 2023  
**Lab Number** : 06013333 **Diagnosed** : 22 Nov 2023  
**Unique Number** : 10752477 **Diagnostician** : Don Baldrige  
**Test Package** : IND 2 ( Additional Tests: KF, PrtCount )

**EAST CAROLINA METAL TREATING**  
 1117 CAPITAL BLVD  
 RALEIGH, NC  
 US 27603  
 Contact: STEVE Q  
 STEVEQ@ECMTINC.COM

To discuss this sample report, contact Customer Service at 1-800-237-1369.  
 \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.  
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)